

**METHOD AND APPARATUS FOR THERMAL MANAGEMENT OF CT
ELECTRONICS**

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ABSTRACT OF THE DISCLOSURE:

The present invention discloses a method and apparatus for cooling the electronics associated with Computed Tomography (CT) detector arrays. More 10 particularly, the present invention discloses use of thermoelectric coolers in cooling CT detector electronics. The present invention also provides for using blowers or fans to recirculated air within a plenum for the cooling of CT detector electronics. The present invention also discloses the use of wick type heat pipes being placed either horizontally or with the evaporator end radially farther out than the condenser 15 end such that rotational forces assist with heat flow through the heat pipe for cooling CT detector electronics. The present invention also discloses use of axial groove heat pipes to cool the CT detector electronics because they have enhanced performance under revolving conditions. Lastly, the present invention discloses use of heat sinks and circulation fans in combination with either type of heat pipe.